

Section 1716

1 Payment will be made under:

Pay Item

Tracer Wire
Unpaved Trenching (qty)(size) & (qty)(size)
Unpaved Trenching for Temporary Lead-in
Paved Trenching (qty)(size) & (qty)(size)
Plowing (qty)(size) & (qty)(size)
Directional Drill (qty)(size) & (qty)(size)
Bore and Jack (qty)(size) & (qty)(size)

Pay Unit

Linear Foot
Linear Foot
Linear Foot
Linear Foot
Linear Foot
Linear Foot
Linear Foot

SECTION 1716 JUNCTION BOXES

1716-1 DESCRIPTION

5 Furnish and install junction boxes (pull boxes) with covers, graded stone, grounding systems
6 and all necessary hardware.

1716-2 MATERIAL

8 Refer to Division 10.

Item

Junction Box
Graded Stone

Section

1098-5
545

9 Furnish material, equipment and hardware under this section that is pre-approved on the
10 ITS and Signals QPL.

1716-3 CONSTRUCTION METHODS

12 Install standard size junction boxes as shown in the plans and where underground splicing of
13 electrical cables is necessary. Install standard size junction boxes within 3 ft of pole or pole
14 foundation where transitioning from below ground to a riser assembly. Install standard size
15 junction boxes within 5 ft of each end of each lateral run of conduit for electrical cables.
16 When lateral runs for electrical cables are greater than 150 ft, install additional junction boxes
17 to ensure distances between junction boxes does not exceed 150 ft.

18 Install oversized junction boxes for fiber-optic cables at locations shown in the plans.

19 Provide real world coordinates for all junction boxes and equipment cabinets installed or used
20 under this project. Provide the coordinates in feet units using the North Carolina State Plane
21 coordinate system (1983 North American Datum also known as NAD '83). Furnish
22 coordinates that do not deviate more than 1.7 ft in the horizontal plane and 3.3 ft in the
23 vertical plane. Global positioning system (GPS) equipment able to obtain the coordinate data
24 within these tolerances may be used. Submit cut sheets on the GPS unit proposed to collect
25 the data for approval by the Engineer.

26 Provide both a digital copy and hard copy of all information regarding the location (including,
27 but not limited to, manufacturer, model number, and NCDOT inventory number) in the
28 Microsoft® spreadsheet provided by the Department, shown by example in Figure 1716-1.

NCDOT Inv #	Name	Location	Latitude	Longitude	Manufacturer	Model #
05-0134	Equipment Cabinet	US 70 at Raynor Rd./ Auburn-Knightdale	-78.5500	35.6873	McCain	Type-332
05-0134	Junction Box # 1 (Phase 2 Side)	US 70 at Raynor Rd./ Auburn-Knightdale	-78.5516	35.6879	Quazite	PG1118BA12(Box) PG118HA00(Cover)
05-0134	Junction Box # 2 (Phase 2 Side)	US 70 at Raynor Rd./ Auburn-Knightdale	-78.5506	35.6876	Quazite	PG1118BA12(Box) PG118HA00(Cover)
05-0134	Junction Box # 3 (Near Cabinet)	US 70 at Raynor Rd./ Auburn-Knightdale	-78.5501	35.6873	Quazite	PG1118BA12(Box) PG118HA00(Cover)
05-0134	Junction Box # 4 (Phase 6 Side)	US 70 at Raynor Rd./ Auburn-Knightdale	-78.5486	35.6873	Quazite	PG1118BA12(Box) PG118HA00(Cover)
05-0134	Junction Box # 5 (Phase 6 Side)	US 70 at Raynor Rd./ Auburn-Knightdale	-78.5493	35.6876	Quazite	PG1118BA12(Box) PG118HA00(Cover)
05-0134	Junction Box # 6 (Phase 4 Side)	US 70 at Raynor Rd./ Auburn-Knightdale	-78.5503	35.6879	Quazite	PG1118BA12(Box) PG118HA00(Cover)

Figure 1716-1. Spreadsheet. Submit coordinate information in a spreadsheet provided by the Department and in accordance with this article.

1716-4 MEASUREMENT AND PAYMENT

Junction Box (____) will be measured and paid in actual number of junction boxes of each size and type furnished, installed and accepted.

No measurement will be made of covers, graded stone and grounding systems as these will be incidental to furnishing and installing junction boxes.

Payment will be made under:

Pay Item

Junction Box (____)

Pay Unit

Each

SECTION 1720 WOOD POLES

1720-1 DESCRIPTION

Furnish and install poles, grounding systems and all necessary hardware.

1720-2 MATERIAL

Refer to Division 10.

Item

Grounding Electrodes
Inspection Requirements
Wire
Wood Poles

Section

1091-6
1082
1091-2
1082